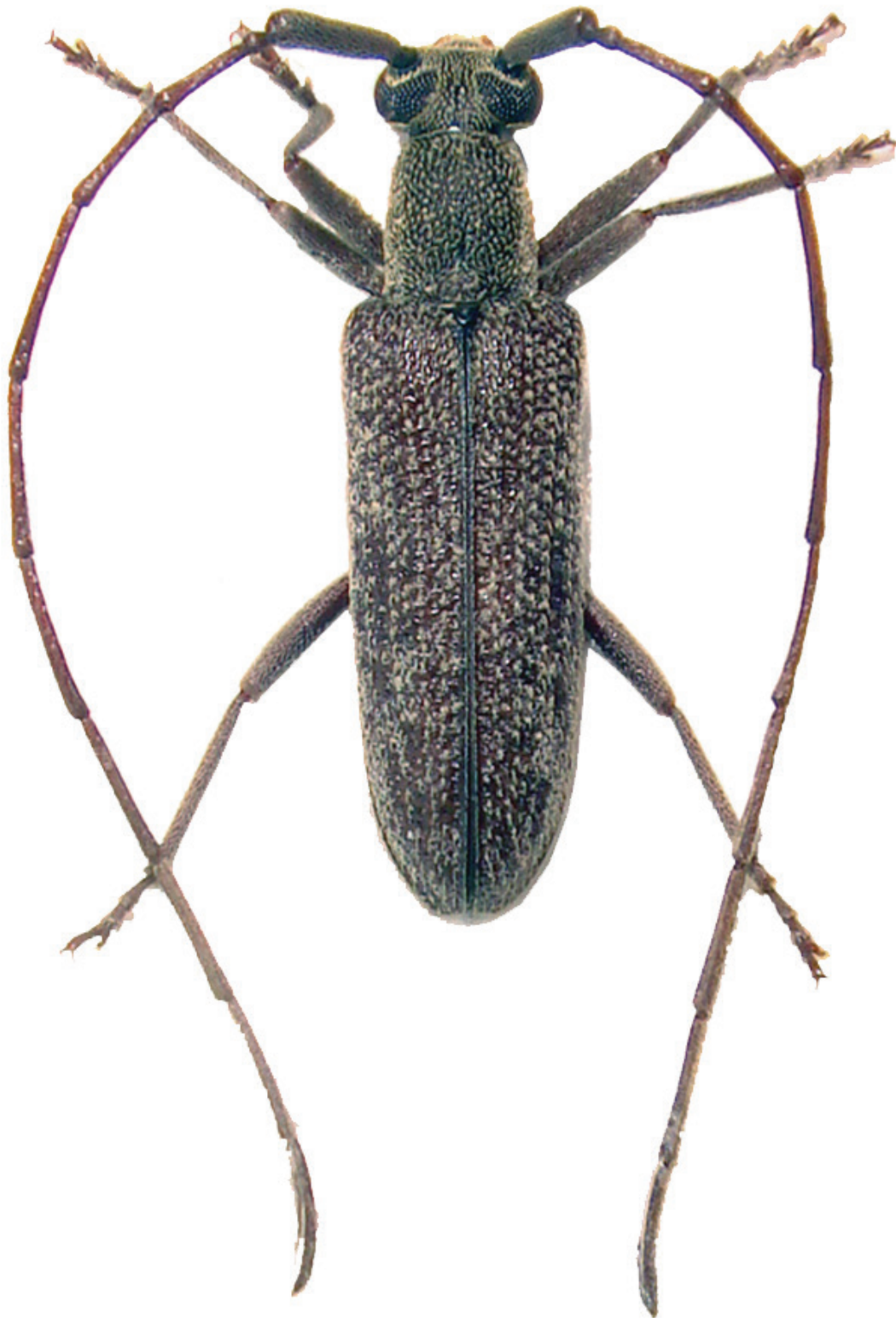


Hong Kong Entomological Bulletin



Hong Kong Entomological Bulletin

Published by the Hong Kong Entomological Society

Volume 6 (1) April 2014

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Cover photograph: *Caraphia lepturoides* (Matsushita, 1933) male, Photo by Mei-Ying Lin

Erratum for issue 4(1), p8:

The species described as *Sphex sericeus* (Fabricius, 1793) was wrongly identified and is in fact *Isodontia aurifrons* (Smith, 1859). In consequence all references to *S. sericeus* in the text should be replaced by *I. aurifrons*. While figure 23 rightly shows *S. sericeus* it should not have been included. Figures 24 to 28 however, are correctly attributed to *I. aurifrons*.

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Provisional Distributional Checklist of Hong Kong Social Wasps (Hymenoptera: Vespidae: Vespinae, Polistinae, Stenogastrinae)

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ABSTRACT

We list 27 species of social vespids recorded to date in Hong Kong in the subfamilies Stenogastrinae, Polistinae and Vespinae. Synonymies, generic revisions and species distribution along with literature references are also given.

Key words: Vespidae, Stenogastrinae, Polistinae, Vespinae, *Eustenogaster*, *Vespa*, *Vespula*, *Polistes*, *Ropalidia*, *Parapolybia*

INTRODUCTION

The social wasps, i.e. hornets, yellow-jackets, paper wasps and hover wasps are well represented in Hong Kong. To date, however, there is no checklist for these Hong Kong social wasps that includes well corroborated taxonomic information, although attempts have been made previously in an identification guide (Barthélémy, 2005) and a monograph on hornets occurring in Hong Kong (Lee, 2010).

The social wasps all construct nests, with the number of cells ranging in Hong Kong from several thousand in large nests of hornets (*Vespa velutina* Lepeletier, 1836 and *Vespa affinis* (Linnaeus, 1764) to less than 20 for hover wasps. All the social wasps in Hong Kong are seasonal in their colony activities, save for *Vespula flaviceps* (Smith, 1858), which may initiate nests all year long. Many species select man-made structures for nesting sites. All species are predaceous on other arthropods as food for larvae, while the adults feed essentially on carbohydrates emanating from plant sources (nectar, sap). As such social wasps play important roles in ecosystems and should be regarded as valid bio-indicators of environmental conditions and their predaceous habits make them potentially effective biological control agents (Nugroho et al. 2011).

The Vespidae comprise six monophyletic subfamilies worldwide (Pickett & Carpenter 2010), of which three, the Stenogastrinae, Polistinae and Vespidae, are social (Carpenter 1982) and represented locally. The Stenogastrinae are distributed from India to New Guinea and comprise 61 valid species, of which one is known to occur in Hong Kong. The Polistinae are cosmopolitan and are divided into four tribes, of which two are present in Hong Kong, the Polistini (about 220 species worldwide, nine species in Hong Kong) and the Ropalidiini (about 270 species worldwide, seven species in Hong Kong). Finally the cosmopolitan Vespinae comprise nearly 70 species, of which ten occur in Hong Kong. Most vespine species (especially *Vespa* species) show

remarkable colour variation, which historically has led to the formal recognition of many subspecies. Archer (1991, 1992, 1994, 1995 and 1997) synonymised subspecies of *V. affinis*, *V. crabro*, *V. ducalis*, *V. mandarinia*, *V. tropica* and *V. velutina* under the nominate species, and Carpenter and Kojima (1997) sank all remaining subspecies into their nominate species.

We concur with Nixon and Wheeler (1990) that in a phylogenetic system a subspecies has no place; however, the species level taxonomy in the Polistinae is yet much behind that of the Vespinae and still include many subspecific taxa of which proper status, diagnosable species or synonyms, have not yet been determined. Consequently, we have maintained subspecies for the genus *Polistes*, following the most recent practice.

The present species checklist was made based on specimens that we collected in Hong Kong and are deposited in our personal collections and in the Natural History Collection at Ibaraki University, Mito, Japan. Nomenclatural information was basically compiled by extracting the information from the checklists/catalogues of social wasps uploaded on the web pages of one of the authors (JK; <http://iunh2.sci.ibaraki.ac.jp/wasp/list.html>).

The arrangement of the species in each genus/subgenus is alphabetical and each name is accompanied by the original citation, followed by synonymies and generic changes (incorrect spellings are indicated by an exclamation mark in square brackets), which are listed chronologically. We also provide a distributional summary for which we have chosen to designate Hong Kong and Taiwan independently of China for the sole purpose of reflecting the distributional records. The type depositories (as far as they were determined based on the literature) are given in brackets after the original locality(ies). The abbreviations of the museums/institutions in which the type materials are deposited are as follows:

BMNH: The Natural History Museum, London, UK.

FAKU: Department of Entomology, Faculty of Agriculture, Kyushu University, Fukuoka, Japan

FSCA: Florida State Collection of Arthropods, Gainesville, USA.

FSKU: Faculty of Science, Kagoshima University, Japan.

HEC: Hope Entomological Collection, University Museum, Oxford, UK.

HNHM: Hungarian Natural History Museum, Budapest, Hungary.
 IEBR: Institute of Ecology and Biological Resources, Hanoi, Vietnam.
 IUNH: Natural History Collection at Ibaraki University, Mito, Japan.
 IMZ: Istituto e Museo di Zoologia, Università di Torino, Italy.
 ISEZ: Instytut Systematyki i Ewolucji Zwierząt, Polska Akademia Nauk, Kraków, Poland.
 IZAS: Institute Zoology Academia Sinica, Beijing, PRC.
 KIZAS: Kunming Institute of Zoology, Academia Sinica, Kunming, China.
 MCZ: Museum of Comparative Zoology, Harvard University, Cambridge, USA.
 MHN: Museum d'Histoire Naturelle, Genève.
 MNHN: Museum National d'Histoire Naturelle, Paris, France.
 MSNG: Museo Civico di Storia Naturale di Genova Giacomo Doria, Genova, Italy.
 NHMB: Naturhistorisches Museum, Basel, Germany.
 NIAES: National Institute of Agro-environmental Studies, Tsukuba, Japan.
 NUS: Zoological Reference Collection, Department of Zoology, National University of Singapore, Singapore.
 RMNH: Nationaal Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke Historie), Leiden, Netherlands.
 SEIHU: Systematic Entomology Institute, Hokkaido University Museum, Sapporo, Japan.
 TARI: Taiwan Agricultural Research Institute, Wufeng, Taichung, Taiwan.
 USNM: National Museum of Natural History, Washington, D.C., USA.
 ZMA: Zoologisch Museum Amsterdam, Amsterdam, Netherlands.
 ZI: Zoological Institute, Russian Academy of Sciences, St Petersburg.
 ZMHU: Zoologisches Museum der Humboldt-Universität, Berlin, Germany.
 ZMUC: Universitets Kobenhavn, Zoologisk Museum, Kobenhavn, Denmark.
 ZMUU: Zoological Museum, Uppsala University, Uppsala, Norway.
 ZSBS: Zoologisches Sammlung des Bayerischen Staates, München, Germany.
 ZSNM: Zoologische Sammlung, Naturhistorisches Museum, Wien, Austria.

CHECKLIST OF SOCIAL VESPIDAE OCCURRING IN HONG KONG

Subfamily Stenogastrinae Bequaert, 1918

Genus *Eustenogaster* van der Vecht

Eustenogaster van der Vecht, 1969, *in* Nature and Life in S. E. Asia 6: 165.

Type species: *Ischnogaster micans* de Saussure, 1852, by original designation

Paravespa Bell, 1936, J. Bombay Nat. Hist. Soc. 38: fig. 1, 803, 806.

Type species: *Paravespa eva* Bell, 1936 (= *Stenogaster eximoides* Dover and Rao, 1922), by subsequent designation of van der Vecht and Carpenter, 1990, Zool. Verh., Leiden 260: 44. Junior homonym of *Paravespa* Radoszkowski, 1886.

nigra Saito and Nguyen

Eustenogaster scitula (Bingham, 1897): Nguyen and Khuat, 2003: 696 (misidentification, partly).

Eustenogaster nigra: Nguyen and Khuat, 2004: 38, 40. Nomen nudum.

Eustenogaster nigra Saito and Nguyen, 2006, Am. Mus. Novitat. 3534: 1-5 – “Viet Nam: Tam Dao (outside town), ca. 900 m, Vinh Phuc” (holotype female, IUNH as a long term loan from the IEBR).

Distribution: Vietnam. South China. **Hong Kong.**

Subfamily Polistinae

Tribe **Polistini** Lepeletier, 1836

Genus *Polistes* Latreille

Subgenus *Gyrostoma* Kirby

Gyrostoma Kirby, 1828, *in* Kirby and Spence, Introd. Entomol. Ed. 5 (of whole work), Ed. 2 (of vol. 3): 36, 631, replacement name for *Cyclostoma* Kirby, 1826, non Lamarck, 1799 (Mollusca).

Cyclostoma Kirby, 1826, *in* Kirby and Spence, Introd. Entomol. Ed. 1, 3: 36, 633, genus.

Type species: *Cyclostoma gigas* Kirby, 1826, by monotypy.

Megapolistes van der Vecht, 1968, Bijdr. Dierk. 38: 97, subgenus of *Polistes* Latreille.

Type species: *Vespa olivacea* DeGeer, 1773, by original designation.

Nygmopolistes Richards, 1973, Rev. Bras. Entomol. 17: 91, 93, 98, subgenus of *Polistes* Latreille.

Type species: “*Polistes sulcatus* Smith, 1852 (= *P. rugifrons* Cameron, 1900)” by original designation.

Megapostes [!]; Lee, 1982, Hornets Agric. Regions China: 122, 124, 126.

gigas (Kirby)

Cyclostoma gigas Kirby, 1826, in Kirby and Spence, Introd. Entomol. Ed. 1, 3: 36 - "China".

Polistes orientalis Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 519 - "de la Chine".

Polistes gyrostoma de Saussure, 1854, Et. Fam. Vesp. 2: 104 - "les Indes Orientales" (BMNH).

Gyrostoma orientalis "Kirby" de Saussure, 1854, Et. Fam. Vesp. 2: 104. As synonym of *Polistes gyrostoma* de Saussure. Unavailable under Art. 11(e) of the International Code of Zoological Nomenclature.

Polistes confusus Smith, 1857, Cat. Hym. Br. Mus. 5, Vesp.: 102 - "India, China" (BMNH).

Distribution: India: Sikkim. Vietnam. South China. **Hong Kong.** Taiwan.

olivaceus (DeGeer)

Vespa olivacea DeGeer, 1773, Mem. Hist. Insect. 3: 582, pl. 29 fig. 9 - "en Amérique" (incorrect labelling).

Vespa hebraea Fabricius, 1787, Mant. Insect. 1: 292 - "in India orientali" (India) (ZMUC).

Vespa undata Olivier, 1791, Encyc. Method. 6: 684 - "Indes Orientales" (India).

Vespa macaensis Fabricius, 1793, Entomol. Syst. 2: 259 - "in Macao Indiae" (BMNH & ZMUC).

Polistes flavipennis de Saussure, 1853, Et. Fam. Vesp. 2: 52 - "Le cap de Bonne-Espérance" (MNHN).

Polistes hebreus [!]; Radoszkowski, 1871, Horae Entomol. Soc. Ross. 8: 195.

Polistes olivaceous [!]; Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33(242): 467-484.

Distribution: Madagascar. Reunion. Mauritius. Tanzania: Zanzibar. Amirantes. Seychelles. Chagos Archipelago. Egypt. Oman. Iran. Afghanistan. India: Jammu and Kashmir, Assam, Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Sikkim, Tripura, Uttar Pradesh, West Bengal. Sri Lanka. Nepal. Myanmar. Southern China. **Hong Kong.** Vietnam. Laos. Cambodia. Thailand. Malaysia. Singapore. Indonesia: Kalimantan. Marianas. New Caledonia. Fiji. Tongas. Samoa. Society Islands: Tahiti. Tuamotu Archipelago: Fakarava. Marquesas: Tahuata, Hiva Oa. Introduced: Chile: Easter Islands; USA: Hawaii; Australia: Queensland; New Zealand.

jokahamae Radoszkowsky

Polistes jokahamae Radoszkowski, 1887, Horae Entomol. Soc. Ross. 21: 435 - "Japan: Jokahama" (ISEZ).

Polistes japonicus Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 417, non de Saussure, 1858 - "Japan" (lectotype female, HEC).

Polistes jadvigae Dalla Torre, 1904, Genera Insect. 19: 70. Replacement name for *japonicus* Cameron, 1900, non de Saussure, 1858.

Polistes perkinsi Kohl, 1908, Denkschr. Akad. Wiss., Wien 81: 313.

Polistes okinawensis Matsumura and Uchida, 1926, Insect. Matsum. 1(1): 34 - "Okinawa (Okinawa-honto, Ishigakijima)", (SEIHU).

Polistes macaensis tahitensis Cheesman, 1928, Ann. Mag. Nat. Hist. (10)1: 180 - "Tuamotu Arch.: Napuka, ... Society Is.: Tahiti, ... Bora Bora" (BMNH).

Polistes perkinsii [!]; Liu, 1937, Peking Nat. Hist. Bull. 11(3): 313.

Polistes fadwigae [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 20.

Polistes okinawaensis [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 33.

Distribution: India. China. **Hong Kong.** Taiwan. Mongolia. Korea. Japan: Hokkaido, Honshu, Shikoku, Kyushu, Ryukyu Islands. Society Islands: Bora Bora, Tahiti. Tuamotu Archipelago: Napuka. Introduced in the USA: Hawaii.

rothneyi grahami van der Vecht

Polistes rothneyi grahami van der Vecht, 1968, Bijdr. Dierk. 38: 104 - "Hangchow" (China) (USNM), also from various places in China.

Distribution: China. **Hong Kong**

Subgenus *Polistella* Ashmead

Polistella Ashmead, 1904, Proc. U.S. Natl. Mus. 28: 133.

Type species: *Polistes manillensis* de Saussure, 1853, by original designation. (Misidentification of *Protopolybia sedula* (de Saussure) = *P. exigua* (de Saussure)).

Stenopolistes van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 101, subgenus of *Polistes* Latreille.

Type species: *Polistes lateritius* Smith, 1857, by original designation.

japonicus de Saussure

Polistes japonicus de Saussure, 1858, Rev. Mag. Zool. (2) 10: 260 - "le Japon" (lectotype, MHN).

Polistes erythrocerus Cameron, 1900, Ann. Mag. Nat. Hist. (7) 8: 418 - "Kamakura, Japan" (BMNH).

Polistes japonicus var. *formosana* form *koshunensis* Sonan, 1938, Arbeit. Morphol. Taxon. Entomol. Berlin Dahlem 5: 68. Unavailable under Art. 45(g) (ii)(1) of the International Code of Zoological Nomenclature.

Polistes japonicus [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 81.

Polistes hengchunensis Kuo, 1987, in Kuo and Yeh, J. Natl. Chiayi Inst. Agric. 16: 81.

Polistes hengchun [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 82.

Polistes shekouensis Kuo, 1987, in Kuo and Yeh, J. Natl. Chiayi Inst. Agric. 16: 82.

Polistes japonicus var. *fomosanus* [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 83.

Distribution: Vietnam. China. **Hong Kong**. Taiwan. Korea. Japan: Honshu, Shikoku, Kyushu, Osumi Islands.

sagittarius sagittarius de Saussure

Polistes sagittarius de Saussure, 1853, Et. Fam. Vesp. 2: 56 - "Les Indes Orientales, la Chine" (India & China) (MHN & BMNH).

Polistes sagittarium [!]; Das and Gupta, 1989, Orient. Insect. Monogr. 11: 67.

Distribution: India: Himachal Pradesh, Delhi, Uttar Pradesh, Sikkim, West Bengal, Assam, Nagaland, Manipur, Tripura. Nepal. China. **Hong Kong**. Myanmar. Thailand. Malaysia. Singapore. Indonesia: Sumatra, Kalimantan, Java, Bali, Sulawesi.

stigma stigma (Fabricius)

Vespa stigma Fabricius, 1793, Entomol. Syst. 2: 275 - "India orientali" (ZMUC).

Distribution: Thailand. Malaysia. Singapore. Indonesia: Sumatra, Java, Bali, Lombok. **Hong Kong**. Taiwan.

strigosus strigosus Bequaert

Polistes strigosus Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 269 - "Wong-Sa-Shui, South Kwangsi, China" (MCZ).

Polistes strigosus [!]; Das and Gupta, 1984, Orient. Insect. 17: 415.

Distribution: China. **Hong Kong**. Taiwan.

Subgenus *Polistes* Latreille

Polistes Latreille, 1802, Hist. Nat. Crust. Insect. 3: 363.

Type species: *Vespa gallica* Linnaeus, 1767, by subsequent designation of Latreille, 1810, Consid. Gen. Crust. Arachn. Insect.: 438.

Polistes [!]; Palisot de Beauvois, 1818, Insect. Recueill. Afrique Amerique: pl. 8; du Buysson, 1892, Ann. Soc. Entomol. France 61: 59; H. von Ihering, 1896, Zool. Anz. 19: 452.

Eupolistes Dalla Torre, 1904, Genera Insect. 19: 68, name for "Premiere division" of *Polistes* Latreille in de Saussure, 1853, Et. Fam. Vesp. 2: 45 (61 species).

Type species: *Vespa gallica* Linnaeus, 1767, by subsequent designation of Richards, 1973, Rev. Bras. Entomol. 17 (13): 86.

Pseudopolistes Weyrauch, 1937, Zool. Jahrb. (Abt. Syst. Okol. Geogr. Tiere) 70: 266. Unavailable; no type species designated.

Sulcopolistes Bluthgen, 1938 (1937), Konowia 16: 273, subgenus of *Polistes* Latreille.

Type species: *Polistes semenowi* Morawitz, 1889, by original designation.

Polistula Weyrauch, 1938, Arbeit. Physiol. Angewand. Entomol. 5(3): 273. Unavailable; no type species designated.

Polistula Weyrauch, 1939, Arch. Naturgesch. (N. E) 8(2): 148.

Type species: *Polistes kohli* Dalla Torre, 1904 (= *Polistes biglumis* Linnaeus, 1758) by original designation.

Pseudopolistes Weyrauch, 1939, Arch. Naturgesch. (N. F) 8(2): 195, validation by type selection of *Pseudopolistes* Weyrauch, 1937.

Type species: *Polistes sulcifer* Zimmermann, 1930, by original designation.

Leptopolistes Bluthgen, 1943, Arch. Naturgesch. (N. F) 12(1): 99, 121, subgenus of *Polistes* Latreille.

Type species: *Polistes associus* Kohl, 1898, by original designation.

chinensis chinensis (Fabricius)

Vespa chinensis Fabricius, 1793, Entomol. Syst. 2: 261 - "in China" (ZMUC).

Polistes caspicus Yoshikawa, 1962, J. Biol., Osaka City Univ. 13: 21, nomen nudum.

Distribution: Russia: Siberia. China. **Hong Kong**. Taiwan. Japan: Okinawa.

Tribe **Ropalidiini**

Genus *Parapolybia* de Saussure

Parapolybia de Saussure, 1854, Ét. Fam. Vesp. 2: 207, division of subgenus *Polybia* of genus *Polybia* Lepeletier.

Type species: *Polybia indica* de Saussure, 1854, by subsequent designation of Bingham, 1897, Fauna Br. India, Hym. 1: 382.

indica (de Saussure)

Polybia indica de Saussure, 1854, Ét. Fam. Vesp. 2: 207, pl. 26 fig. 3 (in division *Parapolybia*), female - "La Chine" (MNHN).

Stelopolybia indica; du Buysson, 1913, Bull. Soc. Entomol. France 1913: 298.

Parapolybia indica; von Schulthess, 1913, Mitt. Schweiz. Entomol. Ges. 12: 153 & 154, pl. 11 fig. 1, pl. 11B fig. 7.

Parapolybia indica indica; van der Vecht, 1966, Zool. Verh., Leiden 82: 26, 27, fig. 11a-b.

Distribution: India. Nepal. Myanmar. Thailand. Vietnam. China. **Hong Kong**. Taiwan. Korea. Japan.

Remarks: Currently four subspecies, nominotypical subspecies, *bioculata* van der Vecht, 1966, *fulvinerva* (Cameron, 1900) and *tinctipennis* (Cameron, 1900), are recognized in *P. indica*. Their taxonomic status, diagnosable species or local colour forms, have not yet been determined; furthermore there could be more than two unnamed species in the one currently treated as *P. indica indica* (F. Saito-Morooka & J. Kojima, unpublished data).

nodosa van der Vecht

Parapolybia nodosa van der Vecht, 1966, Zool. Verh., Leiden 82: 25 & 39 - "Formosa: ... Pilam" (RMNH). Also from four other localities in Taiwan; Myanmar (Tenasserim); China (Fukien); India (Umbaso); Thailand.

Distribution: India. Nepal. Myanmar. Thailand. Vietnam. China. **Hong Kong**. Taiwan.

varia (Fabricius)

Vespa varia Fabricius, 1787, Mant. Insectorum 1: 293 (in subgenus *Parapolybia*) - "China" (ZMUC).

Polistes varia; Fabricius, 1804, Syst. Piez.: 279.

Polybia orientalis de Saussure, 1854, Ét. Fam. Vesp. 2: 208, pl. 26 fig. 2 - "La Chine" (BMNH).

Polybia artifex Smith, 1860 (1861), J. Proc. Linn. Soc. Zool. 5: 90, female - "Makassar" (Sulawesi) (HEC).

Icaria quadrimaculata Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 496, male - "Bengal, probably Barrackpore" (HEC).

Icaria carinata Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 499, male - "Khasia Hills" (India) (HEC). Junior primary homonym of *Icaria carinata* de Saussure, 1890.

Icaria wroughtoni Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 500, - "Poona" (holotype female, BMNH no. 18.730).

Icaria fuscipennis Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 501, female - "Khasia Hills" (India), (HEC).

Icaria cameroni Dalla Torre, 1904, Genera Insectorum 19: 73, replacement name for *Icaria carinata* Cameron, 1900, non de Saussure, 1890 - (*I. Cameroni* [!]).

Icaria singaporensis Cameron, 1904, J. Straits Br. R. Asiat. Soc. 41: 120, female - "Singapore", (type depository unknown, though indicated as NUS in the original citation).

Icaria carinifera Schulz, 1906, Berlin. Entomol. Zeitschr. 51: 328, replacement name for *Icaria carinata* Cameron, 1900, non de Saussure, 1890.

Polybia varia; Schulz, 1912, Berlin. Entomol. Z. 57: 86, 101, (syn.: *Polybia orientalis* de Saussure).

Icaria annulipes Cameron, 1913, Ind. For. Rec. 4: 115 - "Dehra Dun" (India: Uttar Pradesh) (BMNH no. 18.732a & b).

Stelopolybia disticha du Buysson, 1913, Bull. Soc. Entomol. France 1913: 298, female - "Chine: Kiang-si ...; Chang-Hai" (MNHN).

Stelopolybia orientalis; du Buysson, 1913, Bull. Soc. Entomol. France 1913: 298, 299.

Parapolybia orientalis; von Schulthess, 1913, Mitt. Schweiz. Entomol. Ges. 12: 153, 155, pl. 11 fig. 3, 11B fig. 8; 1927, Suppl. Entomol., Berlin 16: 83.

Parapolybia orientalis var. "*carinata* Smith i. litt."; von Schulthess, 1913, Mitt. Schweiz. Entomol. Ges. 12: 155, 156, pl. 11B fig. 9.

Parapolybia disticha; von Schulthess, 1927, Suppl. Entomol., Berlin 16: 83.

Parapolybia varia; Liu, 1936-37, Peking Nat. Hist. Bull. 11 (3): 205, 348.

Parapolybia varia varia; Giordani Soika, 1976, Ann. Hist. Nat. Mus. Natl. Hung. 68: 287.

Distribution: India. Nepal. Myanmar. Thailand. Malaysia: Peninsular Malaysia, Sabah, Sarawak. Indonesia: Sulawesi, Sumbawa, Sumba, Riouw Archipelago (= Kepulauan Riau). Philippines. Vietnam. China. **Hong Kong**. Korea. Japan.

Genus *Ropalidia* Guérin-Ménéville

Ropalidia Guérin-Ménéville, 1831, in Duperrey, Voyage de la Coquille, Zoologie, Atlas, Insectes: pl. 9 fig. 8.

Type species: *Ropalidia maculiventris* Guérin-Ménéville, 1831, by monotypy.

Rhopalidia Guérin-Ménéville, 1838, in Duperrey, Voyage de la Coquille, Zoologie 2, 2^e partie, 1^{ère} division: 266. Non *Rhopalidia* Lepeletier, 1836, but treated as an incorrect spelling of *Ropalidia* Guérin-Ménéville, 1831 and suppressed by

Opinion 1051 (ICZN, 1976).

Rhopalia [!] Guérin-Ménéville, 1838, in Duperrey, Voyage de la Coquille, Zoologie 2: 317 (in explanation of plates). Incorrect spelling of *Ropalidia* Guérin-Ménéville.

Anthreneida White, 1841, Ann. Mag. Nat. Hist. (1) 7: 321, as genus. Synonymized under *Ropalidia* Guérin-Ménéville by Kojima, 1997, Nat. Hist. Bull. Ibaraki Univ. 1: 102.

Type species: *Anthreneida coronata* White, 1841 (= *Vespa sumatrae* Weber, 1801), by monotypy.

Icaria de Saussure, 1853, Ét. Fam. Vesp. 2: 22, pls. 4 & 5.

Type species: "*I. maculiventris* (Guer.)" (= *Ropalidia maculiventris* Guérin-Ménéville, 1831), by subsequent designation of Bingham, 1897, Fauna Br. India, Hym. 1: 385.

Anthreneidea [!] de Saussure, 1854, Ét. Fam. Vesp. 2: 235. Incorrect spelling of *Anthreneida* White.

Icharia [!] Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 243. Incorrect spelling of *Icaria* de Saussure.

Icariastrum Dalla Torre, 1904, Genera Insectorum 19: 72, name for group I of genus *Icaria* de Saussure in de Saussure, 1862, Stettin. Entomol. Ztg. 23: 132 (5 species). Synonymized under *Anthreneida* White by van der Vecht, 1962: Zool. Verh. Leiden 57: 5.

Type species: *Icaria opulenta* Smith, 1857, by subsequent designation of Meade-Waldo, 1913, Ann. Mag. Nat. Hist. (8) 11: 46.

Icarielia Dalla Torre, 1904, Genera Insectorum 19: 72, name for group II of genus *Icaria* de Saussure in de Saussure, 1862, Stettin. Entomol. Ztg. 23: 132 (9 species). Synonymized under *Ropalidia* Guérin-Ménéville by Kojima, 1997: Nat. Hist. Bull. Ibaraki Univ. 1: 103.

Type species: *Icaria flavopicta* Smith, 1857, by subsequent designation of Meade-Waldo, 1913, Ann. Mag. Nat. Hist. (8) 11: 46.

Icariella [!] Dalla Torre, 1904, Genera Insectorum 19, Index: 96. Incorrect spelling of *Icarielia* Dalla Torre.

Icariola Dalla Torre, 1904, Genera Insectorum 19: 72, name for group III of genus *Icaria* de Saussure in de Saussure, 1862, Stettin. Entomol. Ztg. 23: 133 (11 species). Synonymized under *Anthreneida* by Das and Gupta, 1989: Ori. Ins. Monogr. 11: 108.

Type species: *Icaria gregaria* de Saussure, 1853, by subsequent designation of Meade-Waldo, 1913, Ann. Mag. Nat. Hist. (8) 11: 46.

Zuba Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 3 & 23, subgenus of *Ropalidia* (14 species). Unavailable: no type species designated.

Zuba Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 57; validation by type selection of *Zuba* Cheesman.

Type species: *Icaria gregaria* de Saussure, 1853, by original designation.

Paraicaria Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 248, as genus. Synonymized under *Ropalidia* Guérin-Ménéville by Kojima, 1997: Nat. Hist. Bull. Ibaraki Univ. 1: 103.

Type species: *Paraicaria bicolor* Gribodo, 1892 (= *Ropalidia bicolorata* van der Vecht, 1962, replacement name), by monotypy.

Polistratus Cameron, 1906, in Wichmann, Nova Guinea 5, Zool. 1: 59, as genus. Synonymized under *Ropalidia* Guérin-Ménéville by Kojima, 1997: Nat. Hist. Bull. Ibaraki Univ. 1: 103.

Type species: *Polistratus cariniscutis* Cameron, 1906 (= *Icaria brunnea* Smith, 1858), by monotypy.

fasciata (Fabricius)

Eumenes fasciata Fabricius, 1804, Syst. Piez.: 290 - "Java" (syntypes, ZMUC).

Polistes bioculata Fabricius 1804, Syst. Piez.: 278 - "nova Cambria" (ZMUC).

Icaria picta de Saussure, 1854, Ét. Fam. Vesp.: 238 - "Le Bengale" (India) (MNHN).

?*Icaria pendula* Smith; de Saussure, 1867, Reise Novara, Zool. 2, 1 Hym.: 22.

Icaria variegata Smith; Bingham, 1897, Fauna Br. India, Hym. I: 386 & 388 - "Poona, Bombay; Bangalore; Tenasserira" (India).

Icaria maculifrons Cameron, 1903b, J. Straits Br. R. Asiat. Soc. 39: 172 - "Santubong" (Borneo) (BNHM).

Icaria intermedia Cameron, 1905, Tijdschr. Entomol. 48: 70, female - "Tjandi near Semarang" (lectotype, ZMA).

Icaria ferruginea; Kuroiwa, 1908, Prov. List Hym. Loochoo: 5, misidentification.

Ropalidia variegata; Dover, 1929, Bull. Raffles Mus., Singapore 2: 47.

Ropalidia picta; van der Vecht, 1941, Treubia 18: 104, 111 & 145.

Ropalidia fasciata; van der Vecht, 1959, Arch. Neerl. Zool. 13(1), suppl. 1958: 245.

Distribution: Nepal. India. Myanmar. Thailand. Malaysia: Peninsular Malaysia, Sabah, Sarawak. Indonesia: Sumatra, Kalimantan, Nias, Bangka Island, Java, Karimon Djawa Island, Bali, Komodo, Flores, Timor. Vietnam. South China. **Hong Kong**. Taiwan. Philippines: Palawan. Japan: Ryukyu Islands.

hongkongensis (de Saussure)

Icaria hongkongensis de Saussure, 1854, Ét. Fam. Vesp. 2: 239 - "La Chine. Hong-Kong" (BNHM).
Ropalidia hongkongensis; Dover, 1926, China J. Sci. Arts 4: 233.

Ropalidia hongkongensis juncta van der Vecht, 1941, Treubia 18: 141, male, female - "Tjiboerol near Buitenzorg, W.-Java" (holotype, RMNH).

Distribution: South China. **Hong Kong.** India: Meghalaya. Myanmar. Vietnam. Indonesia: Bangka, Java.

marginata (Lepeletier)

Vespa ferruginea Fabricius, 1793, Entomol. Syst. 2: 280 - "India orientali" (ZMUC). Junior primary homonym of *Vespa ferruginea* Gmelin, 1790, and *Vespa ferruginea* Olivier, 1792.

Polistes ferruginea; Fabricius, 1804, Syst. Piez.: 277.

Polistes sumatrae Fabricius, 1804, Syst. Piez.: 273 - "Sumatra" (ZMUC) - non *Ropalidia sumatrae* (Weber) (= *Vespa sumatrae* Weber, 1801).

Epipona marginata Lepeletier, 1836, Hist. Nat. Insectes Hym. 1: 541, male, female - "Inde" (IMZ?).

Icaria ferruginea; de Saussure, 1853, Ét. Fam. Vesp. 2: 38 - "Indes Orientales" (MNHN).

Icaria marginata; de Saussure, 1854, Ét. Fam. Vesp. 2: 237 - "Indes Orientales".

Icaria ferruginea; Smith, 1871, J. Proc. Linn. Soc. Zool. 11: 378.

Icaria jucunda Cameron, 1898, Mem. Proc. Manchr. Lit. Philos. Soc. 42 (11): 46, female - "New Guinea" (HEC).

Icaria pruinosa Cameron, 1906, Tijdschr. Entomol. 49: 228, female - "Digoel" (New Guinea) (ZMA).

Ropalidia marginata; Dover and Rao, 1922, J. Asiat. Soc. Bengal (n. ser.) 18: 244.

Ropalidia jucunda; Bequaert, 1932, Rés. Scient. Voyage Indes Or. Néerl. Léopold de Belgique 4 (5): 50.

Ropalidia pruinosa; Bequaert, 1932, Rés. Scient. Voyage Indes Or. Néerl. Léopold de Belgique 4 (5): 51.

Ropalidia marginata var. *sundaica* "v. d. Vecht (*in lit.*)" Bequaert and Yasumatsu, 1939, Tenthredo 2: 315. Nomen nudum.

Ropalidia marginata sundaica Esaki, 1939, Vol. Jubilar pro Prof. S. Yoshida: 238. Nomen nudum. van der Vecht, 1941 Treubia 18: 122, - "Koeripan, between Batavia and Buitenzorg, W. Java" (holotype, RMNH).

Ropalidia marginata jucunda; van der Vecht, 1941, Treubia 18: 104 (syn: *I. pruinosa* Cameron), 124.

Ropalidia marginata marginata; van der Vecht, 1941, Treubia 18: 109, 117.

Ropalidia marginata indica van der Vecht, 1941, Treubia 18: 121 ("holotype" from Amballa) (replacement name for *Vespa ferruginea* Fabricius, 1793).

Ropalidia canaria Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 19 - "Papua, Kokoda" (BMNH).

Distribution: Pakistan. India. Sri Lanka. **Hong Kong.** New Guinea. New Britain. Australia: Thursday Island, Queensland. Malaysia: Peninsular Malaysia, Sabah, Sarawak. Indonesia: Bangka, Sumatra, Kalimantan, Java, Kariman Djawa, Lesser Sunda Island, Sulawesi, Talud Island, Tukang Besi Island. Philippines. Mariana Islands. Palau. Volcano Islands.

stigma (Smith)

Polybia stigma Smith, 1858, J. Proc. Linn. Soc. Zool. 2: 114 - "Borneo (Sarawak)" (HEC).

Icaria bioculata (Fabricius); de Saussure, 1867, Reise Novara Zool. 2 (Hym.): 22.

Parapolybia stigma; von Schulthess, 1913, Mitt. Schweiz. Entomol. Ges. 12: 164 (incertae sedis).

Icaria stigma; du Buysson, 1913, Bull. Soc. Entomol. France 1913: 296.

Ropalidia stigma stigma; van der Vecht, 1941, Treubia 18: 110, 126.

Distribution: India. Sri Lanka. Myanmar. Thailand. Malaysia: Peninsular Malaysia, Sabah, Sarawak. Vietnam. **Hong Kong.** Indonesia: Sumatra, Java, Bali. Philippines.

Subfamily **Vespinae**Genus *Vespa* Linnaeus

Vespa Linnaeus, 1758, Syst. Nat., ed. 10, 1: 343, 572.

Type species: "*Vespa crabro*, Fab." (= *Vespa crabro* Linnaeus, 1758), designated by Latreille, 1810, Consid. Gén. Arachn. Ins.: 438.

Macrovespa Dalla Torre, 1904, Gen. Ins. 19: 64.

Type species: *Vespa crabro* Linnaeus, 1758, Designated by Bequaert, 1930, Bull. Brooklyn Ent. Soc. 25:64.

Nyctovespa van der Vecht, 1959, Zool. Meded. Leiden 36(13): 210.

Type species: *Vespa binghami* du Buysson, 1905 by original designation.

affinis (Linnaeus)

Apis affinis Linnaeus, 1764, Mus. Ludov. Ulricae:

417 - "in *Calidis regionibus*" (holotype, ZMUU).
Vespa affinis Fabricius, 1787, Mant. Ins. 1: 287 -
 "in China" (ZMUC). Junior secondary homonym of
Vespa affinis (Linnaeus, 1764).

Vespa unifasciata Olivier, 1791, Encycl. Méthod.
 Ins. 6: 677 - "Indes orientales" (type depository
 unknown). Junior primary homonym of *Vespa*
unifasciata Gmelin, 1790.

Vespa alduini Guérin-Méneville, 1831, in Duperrey,
 Voyage Coquille, Zool., Ins. Hym. Atlas: pl.9 fig.
 6; 1838, Texte 2(2): 264 - (Indonesia) (holotype,
 MSNG).

Vespa bimaculata Guérin-Méneville, 1838, in
 Duperrey, Voyage Coquille, Zool., Ins. Hym. Texte
 2(2) : 264. Unnecessary replacement name for
Vespa alduini Guérin-Méneville. Junior primary
 homonym of *Vespa bimaculata* Geoffrey, 1785 and
 of *Vespa bimaculata* Olivier, 1792.

Vespa nigripennis de Saussure, 1854, Et. Fam.
 Vesp. 2: 156 - "Les Philippines" (holotype, BMNH).
 Junior primary homonym of *Vespa nigripennis*
 DeGeer, 1773.

Vespa cincta var. *picea* du Buysson, 1905, Ann.
 Soc. Ent. France 73: 537 - (New Guinea) (lectotype,
 MSNG). Designation of lectotype by van der Vecht,
 1959, Zool. Meded., Leiden 36: 214.

Vespa indosinensis Pérez, 1910, Act. Soc. Linn.
 Bordeaux 64: 8 - "Anam" (lectotype, MNHN).

Vespa formosana Sonan, 1927, Tans. Nat. Hist.
 Soc. Formosa 17 (89): 125 - (Taiwan) (lectotype,
 TARI).

Vespa affinis continentalis Bequaert, 1936, Treubia
 15(4): 350 - "India: Mangalore" (holotype, USNM).

Vespa affinis var. *hainanensis* Bequaert, 1936,
 Treubia 15(4): 349 - "China: Hainan Island"
 (holotype, MCZ).

Vespa affinis nigriventris van der Vecht, 1957,
 Zool. Verh., Leiden 34: 29 - "Palawan" (Philippines)
 (holotype, FSCA).

Vespa affinis rufonigrans van der Vecht, 1957, Zool.
 Verh., Leiden 34: 29 - "Pulau, Northwest Celebes"
 (Indonesia) (holotype, RMNH).

Vespa affinis archiboldi van der Vecht, 1957, Zool.
 Verh., Leiden 34: 32 - "Hollandia" (Indonesia)
 (holotype, RMNH).

Vespa affinis moluccana van der Vecht, 1957, Zool.
 Verh., Leiden 34: 32 - "Sapura Island near Amboina"
 (Indonesia) (holotype, RMNH).

Vespa affinis alticincta van der Vecht, 1957, Zool.
 Verh., Leiden 34: 33 - "New Britain" (holotype,
 BMNH).

Distribution: India: Bihar, West Bengal,
 Maharashtra, Karnataka, Tamil Nadu, Kerala,

Sikkim, Assam. Sri Lanka. Myanmar. China:
 Guangdong, Fujian, Guangxi, Hunan, Hubei,
 Shanghai. **Hong Kong.** Taiwan. Japan: Ryukyu
 Islands south of Miyako I. Thailand. Laos. Vietnam.
 Malaysia: Peninsular Malaysia, Sabah, Sarawak.
 Singapore. Indonesia: Sumatra, Nias, Bangka,
 Java, Kalimantan, Sulawesi, Talaut Island, Buton,
 Salayar, Sinda Is., Timor, Moluccas (Morotai,
 Ternate, Tidore, Halmahera, Bacan, Buru, Ambon,
 Saparua, Haruku, Seram), Kai Misool, Salawati,
 Waigeo, Sorong, Yapen, New Guinea (Irian Jaya).
 Papua New Guinea, including New Britain and New
 Ireland. Philippines: Palawan, Dumarán, Labuan,
 Mindanao, Samar, Luzon.

analis Fabricius

Vespa analis Fabricius, 1775, Syst. Ent.: 363,
 (BMNH).

Vespa crabro sphinx Christ, 1791, Naturgesch. Ins.:
 217.

Vespa tyrannica Smith, 1857, Cat. Hym. Brit. Mus.
 5, Vesp.: 119 - "Singapore" (lectotype, BMNH).
 Designation of lectotype by van der Vecht, 1959,
 Zool. Meded., Leiden 36: 215.

Vespa japonica Smith, 1868, Ent. Mon. Mag. 4: 279
 - "Hakodadi, in Japan" (lectotype, BMNH). Junior
 primary homonym of *Vespa japonica* Radoszkowski,
 1857, and of *Vespa japonica* de Saussure, 1858.
 Designation of lectotype by Kojima, 1997, Nat. Hist.
 Bull. Ibaraki Univ. 1: 20.

Vespa parallela André, 1884, Ann. Soc. Ent. France
 (6)4, Bull.: lxi - "Wladivostok, sur l'Amour, Sibérie
 orientale" (MNHN).

Vespa insularis Dalla Torre, 1894, Cat. Hym. 9: 147.
 Replacement name for *Vespa japonica* Smith, 1868.

Vespa tridentata Cameron, 1903a, Entomologist
 36: 278 - "Japan" (lectotype, BMNH). Designation
 of lectotype by Kojima, 1997, Nat. Hist. Bull. Ibaraki
 Univ. 1: 20.

Vespa nigrans du Buysson, 1903, Bull. Soc. Ent.
 France 1903: 175 - "Yun-nam, Tsé-Kou" (China)
 (MNHN).

Vespa parallela var. *Biroi* du Buysson, 1905, Ann.
 Soc. Ent. France 73: 487 & 513 - "Singapore"
 (lectotype, MNHN). Designation of lectotype by van
 der Vecht, 1957, Zool. Verh., Leiden 34: 14.

Vespa analis var. *tenebrosa* du Buysson, 1905,
 Ann. Soc. Ent. France 73: 516 - "Java, Goban...
 Gondang" (Indonesia) (lectotype, MNHN).
 Designation of lectotype by van der Vecht, 1957,
 Zool. Verh., Leiden 34: 14.

Vespa analis var. (or subsp.) *barbouri* Bequaert,
 1939, Tans. Am. Ent. Soc. 65: 38 & 40 - "Teesta
 Valley, Sikkim" (India) (MCZ).

Vespa analis var. (or subsp.) *kuangsiana* Bequaert,
 1939, Tans. Am. Ent. Soc. 65: 38 & 42 - "Kwangsi,
 China" (MCZ).

Vespa analis eisa Yamane, 1987, Kontyu 55(4): 628 & 631 - "Yona, Okinawa-jima" (Japan) (FSKU).
Vespa analis nagatomii Yamane, 1987, Kontyu 55(4): 628 & 632 - "Koza-dake, Iriomote-jima" (Japan) (FSKU).

Vespa maguanensis Dong, 2001, J. S.-W. Agric. Univ. 23: 82 - "Yunnan China" (KIZAS).

Vespa hekouensis Dong and Wang, 2003, J. S.-W. Agric. Univ. (Nat. Sci.) 25 (5): 407 - "Hekou, Yunnan" [in Chinese characters] (KIZAS).

Distribution: India: Kashmir, Uttar Pradesh, West Bengal, Tamil Nadu, Meghalaya, Sikkim, Assam. Nepal. China: Sichuan, Yunnan, Hainan, Guangxi, Fujian, Hubei, Zhejiang, Heilongjiang. **Hong Kong.** Taiwan. Myanmar. Thailand. Laos. Vietnam. Peninsular Malaysia. Singapore. Indonesia: Sumatra, Bangka, Sunda Islands (Sebesi, Sangijiang, Sebuku, Sertung, Madura, Lombok, Legundi, Rakata, Krakatau, Panaitan, Deli), Java, Bawean, Bali. Korea. Japan: Hokkaido, Honshu, Shikoku, Kyushu, Nansei Islands. Russia: Amur, Primor'ye.

bicolor Fabricius

Vespa bicolor Fabricius, 1787, Mant. Ins. 1: 288 - "in China" (ZMUC).

Vespa lutea Coquebert, 1804, Illustr. Iconogr. Insect. 3 : 94 - "Massiliae lecta, in navi ex India" (type depositary unknown).

Vespa auraria var. *citriventris* du Buysson, 1905, Ann. Soc. Ent. France 73: 552 - "Sikkim, de Padamstin a Lingtou" (India) (lectotype, MNHN). Also from West Bengal and China. Designation of lectotype by van der Vecht, 1959, Zool. Meded., Leiden 36: 218.

Distribution: India: Uttar Pradesh, West Bengal, Sikkim, Assam, Meghalaya. Bhutan. Nepal. China: Sichuan, Yunnan, Guangxi, Jiangxi, Fujian. **Hong Kong.** Myanmar. Thailand. Laos. Cambodia. Vietnam.

ducalis Smith

Vespa ducalis Smith, 1852, Trans. Ent. Soc. Lond. (N.S.) 2(2): 39 - "Tein-tung, near Nigo-po-foo" (China) (BMNH).

Vespa ducalis var. *pulchra* du Buysson, 1905, Ann. Soc. Ent. France 73: 519 - "Corée, Séoul... Japon ...: Yokohama" (lectotype, MNHN). Designation of lectotype by van der Vecht, 1959, Zool. Meded., Leiden 36: 224.

Vespa matsumurai Sonan, 1935, Trans. Nat. Hist. Soc. Formosa. 25(145): 370 - "Tokyo" (Japan) (holotype, TARI).

Vespa esakii Sonan, 1935, Trans. Nat. Hist. Soc. Formosa. 25(145): 371 - "Izuhara in Tsushina Island" (Japan) (FAKU).

Vespa tropica loochooensis Bequeart, 1936,

Treubia 15(4): 336 & 343 - "Iriomote Island, in the Loo-Choo (or Riu-Kiu) Archipelago" (Japan) (MCZ).
Vespa tropica pseudosoror van der Vecht, 1959, Zool. Meded. 36(13): 224 - "Indo-China: Anam ... Lién-Chièn près Tourane, 1000m" (Vietnam) (MNHN). Also from elsewhere in Vietnam and Taiwan.

Distribution: India: Sikkim, Meghalaya. Nepal. Myanmar. Thailand. Vietnam. China: Gansu, Sichuan, Hainan, Guangdong, Fujian, Hunan, Shanghai, Jiangsu, Liaoning. **Hong Kong.** Taiwan. Russia: Primor'ye. Korea. Japan: Honshu, Shikoku, Kyushu, Ryukyu Islands.

mandarinia Smith.

Vespa mandarinia Smith, 1852, Trans. Ent. Soc. London (N.S.) 2(2): 38 - "Tein-tung, near Ning-po-foo, amongst the mountains" (China) (BMNH).

Vespa magnifica Smith, 1852, Trans. Ent. Soc. London (N.S.) 2(2): 45 - "Nepal" (BMNH & HEC).

Vespa japonica Radoszkowski, 1857, in Motschulsky, Et. Ent. 6 : 410 - "Japan" (ZI).

Vespa bellona Smith, 1871, Proc. Zool. Soc. Lond.: 248 - "Yunan" (China) (BMNH).

Vespa magnifica var. *latilineata* Cameron, 1903a, Entomologist 36: 278 - "Japan ... Hitoyoshi" (BMNH).

Vespa mandarina [!] Dalla Torre, 1894, Cat. Hym. 9: 149. Incorrect spelling of *Vespa mandarinia* Smith.

Vespa magnifica var. *nobilis* Sonan, 1929, Tans. Nat. Hist. Soc. Formosa. 19(101): 137 & 140 - "Musha" (Taiwan) (Holotype, TARI). Also from other localities in Taiwan.

Vespa magnifica sonani Matsumura, 1930, Illustr. Thousand Ins. Japan 2: 1 - "Taiwan, Sina" (lectotype, SE). Designation of lectotype by Kojima, 1997, Nat. Hist. Bull. Ibaraki Univ. 1: 22.

Distribution: India: Himachal Pradesh, Uttar Pradesh, West Bengal, Sikkim, Assam, Meghalaya. Sri Lanka. Nepal. Bhutan. Myanmar. Thailand. Laos. Vietnam. Malaysia: Peninsular Malaysia. China: Sichuan, Yunnan, Jiangxi, Fujian, Hubei, Shanghai, Jiangsu. **Hong Kong.** Taiwan. Russia: Primor'ye. Korea. Japan: Hokkaido, Honshu, Shikoku, Kyushu, Yaku-shima and Tanega-shima Island (Osumi Islands).

mocsaryana du Buysson

Vespa mocsaryana du Buysson, 1905, Ann. Soc. Ent. France 73: 490 & 537 - "Presqu'île de Malacca : Pérak ... ; Sikkim ... ; Assam : Khasia Hills ... ; Tenasserim : Thagata" (HNHM; ZSNM; BNHM & MSNG).

Distribution: India: Meghalaya, Sikkim, Assam. China: Sichuan, Fujian, Anhui. **Hong Kong.** Myanmar. Thailand. Laos. Vietnam. Malaysia:

Peninsular Malaysia. Indonesia: Sumatra.

soror du Buysson

Vespa ducalis var. *soror* du Buysson, 1905, 1905, Ann. Soc. Ent. France 73 : 490 & 519 - "Chine ... Kiang-si" (lectotype, MNHN). Also from elsewhere in China; India; Vietnam. Designation of lectotype by van der Vecht, 1957, Zool. Verh., Leiden 34: 16.

Distribution: China: Yunnan, Hainan, Fujian. **Hong Kong.** Thailand. Laos. Vietnam.

tropica Linnaeus

Sphex tropica Linnaeus, 1758, Syst. Nat., ed. 10, 1: 571 - "in Indiis" (holotype, ZMUU).

Vespa cincta Fabricius, 1775, Syst. Ent.: 362 - "ad littora Malabarica" (India) (ZMUC). Junior primary homonym of *Vespa cincta* Drury, 1773 and of *Vespa cincta* Degeer, 1773.

Vespa crabro tenebrionis Christ, 1791, Naturgesch. Ins.: 216.

Vespa deusta Lepeletier, 1836, Hist. Nat. Ins. Hym. 1: 506 - "Patrie inconnue" (lectotype, IMZ). Designation of lectotype by van der Vecht, 1959, Zool. Meded., Leiden 36: 226.

Vespa unicolor Smith, 1863, J. Proc. Linn. Soc. Lond., Zool. 7: 44 - "Bouru" (Indonesia) (HEC). Junior primary homonym of *Vespa unicolor* Lichtenstein, 1796.

Vespa cinta [!] Wroughton, 1889, J. Bombay Nat. Hist. Soc. 4: 35. Incorrect spelling of *Vespa cincta* Fabricius.

Vespa eulemoides du Buysson, 1905, Ann. Soc. Ent. France 73: 491 & 530 - "Ile Andaman : port Blair" (India) (MSNG).

Vespa affinis var. *trisinata* Pérez, 1910, Act. Soc. Linn. Bordeaux 64: 8 - "Timor" (Indonesia) (MNHN).

Vespa rubricans Pérez, 1910, Act. Soc. Linn. Bordeaux 64: 10 - "Lindi (afrique Orientale Allemande)" (lectotype, MNHN). Designation of lectotype by van der Vecht, 1957, Zool. Verh., Leiden 34: 24.

Vespa tropica var. *anthracina* Bequeart, 1936, Treubia 15(4): 335 & 341 - "Philippines Islands: Sibuan" (holotype, USNM). Also from other localities in the Philippines.

Vespa tropica var. *haematodes* Bequeart, 1936, Treubia 15(4): 336 & 338 - "India: Kooloo" (holotype, MCZ). Also from other localities in India; Sri Lanka; Myanmar and China.

Vespa tropica leefmansii van der Vecht, 1957, Zool. Verh., Leiden 34: 19 - "Solok, Padang, Sumatra" (Indonesia) (holotype, RMNH). Also from Vietnam; Thailand; Malaysia and other Islands of Indonesia. *Vespa tropica trimeres* Vecht, 1957, Zool. Verh.,

Leiden 34: 19 & 22 - "Palu, west Celebes" (Indonesia) (RMNH).

Vespa tropica cebuana Kojima and Reyes, 1984, Kontyû 52(2): 260 - "Cebu City" (Philippines) (NIAES).

Distribution: Afghanistan. Pakistan. India: Himachal Pradesh, Bihar, West Bengal, Maharashtra, Karnataka, Tamil Nadu, Kerala, Sikkim, Assam, Meghalaya, Andaman and Nicobar Islands. Sri Lanka. Nepal. Bhutan. China: Yunnan, Fujian. **Hong Kong.** Myanmar. Thailand. Laos. Cambodia. Vietnam. Malaysia: Peninsular Malaysia, Sarawak. Singapore. Indonesia: Anambas Islands, Sumatra, Nias, Batu, Enggano, Bangka, Belitung, Sunda Islands (Sangijiang, Sebesi, Sebuku, Legundi, Krakatau, Panaitan), Java, Bawean, Madura, Kangean Islands, Bali, Lombok, Komodo, Sumbawa, Sumba, Flores, Wetar, Timor, Kalimantan, Sulawesi, Salayar, Sula Islands, Moluccas (Morotai, Halmahera, Ternate, Tidore, Bacan, Obi, Buru, Ambon, Haruku, Seram), Banda, Waigeo, Aru, New Guinea (Irian Jaya). Papua New Guinea including New Britain. Philippines: Luzon, Lubang, Mindoro, Samar, Leyte, Sibuyan, Panay, Negros, Cebu, Palawan, Jolo, Mindanao, Basilan.

velutina Lepeletier

Vespa velutina "De Haan" Lepeletier, 1836, Hist. Nat. Ins. Hym. 1: 507 - "Inde: Java" (Indonesia) (coll. Serville).

Vespa crabro var. *immaculata* Morawitz, 1889, Horae Soc. Ent. Ross. 23: 161 - "Kansu. Nanpin." (China) (ZI). Junior primary homonym of *Vespa immaculata* Gmelin, 1790.

Vespa fruhstorferi Stadelmann, 1894, Sitz.-Ber. Ges. Naturf. Freunde Berl. 1894 (3): 89 - "in den alpinen Theilen von West-Java auf dem Gunung-Gede . . . in einer Höhe von 8000 Fuss" (Indonesia) (ZMHU?).

Vespa velutina var. *ardens* du Buysson, 1905 (1904), Ann. Soc. Ent. France 73: 550 - "Lombok, Sapit (2000' . . .); I. Sumbawa, près Java" (Indonesia) (ZSNM; HNHN; ZSBS & MNHN).

Vespa auraria var. *nigrithorax* du Buysson, 1905 (1904), Ann. Soc. Ent. France 73: 553 - "Dardjiling" (India) (lectotype, MNHN). Also from Sikkim and Bhutan; China; Indonesia: Sumatra, Sulawesi. Designation of lectotype by van der Vecht, 1957, Zool. Verh., Leiden 34: 37.

Vespa velutina var. *Celebensis* Pérez, 1910, Actes Soc. Linn. Bordeaux 64: 12 - "Bua-Kraeng (Sud-Célèbes)" (Indonesia) (holotype, MNHN).

Vespa velutina var. *megei* Pérez, 1910, Actes Soc. Linn. Bordeaux 64: 13 - Kouéï-Tchéou (Chine centrale)" (MNHN).

Vespa mongolica var. *divergens* Pérez, 1910, Actes Soc. Linn. Bordeaux 64: 16 - "Perak" (Malaysia) (lectotype, MNHN). Designation of lectotype by van der Vecht, 1957, Zool. Verh., Leiden 34: 38.

Vespa flavitarsus Sonan, 1929, Trans. Nat. Hist. Soc. Formosa 19 (101): 137 & 142 - "Taiko-san (Kagi)" (Taiwan) (holotype, TARI). Also from other localities in Taiwan.

Vespa auraria flavitarsis [!], Ma, 1937, Ent. Phytopath. 5 (2): 31. Incorrect spelling of *Vespa flavitarsus* Sonan.

Vespa velutina sumbana van der Vecht, 1957, Zool. Verh., Leiden 34: 34 & 40 - "Kananggar, E. Sumba, 700 m" (Indonesia) (holotype, RMNH).

Vespa velutina variana van der Vecht, 1957, Zool. Verh., Leiden 34: 35 & 37 - "North Siam...Doi Hua Mot, 3000" (RMNH). Also from other localities in Thailand; Laos; Vietnam.

Vespa velutina karnyi van der Vecht, 1957, Zool. Verh., Leiden 34: 35 & 38 - "Deli" (Indonesia: Sumatra) (holotype, RMNH).

Vespa velutina timorensis van der Vecht, 1957, Zool. Verh., Leiden 34: 35 & 40, - "Mollo, 1350m, Timor" (Indonesia) (NHMB).

Vespa velutina floresiana van der Vecht, 1957, Zool. Verh., Leiden 34: 35 & 40 - "Labuan Badjo, Flores" (Indonesia) (RMNH). Also from Komodo.

Distribution: India: West Bengal, Sikkim, Assam. Bhutan. China: Sichuan, Jiangxi, Fujian, Hubei, Zhejiang. **Hong Kong.** Taiwan. Myanmar. Thailand. Laos. Vietnam. Malaysia: Peninsular Malaysia. Indonesia: Sumatra, Java, Bali, Lombok, Sumbawa, Komodo, Sumba, Flores, Timor, Sulawesi. Introduced in France, Korea and Japan (Tsushima Island).

Genus *Vespula*

Vespula Thomson, 1869, Opusc. Ent. 1: 79, subgenus of *Vespa*.

Type species: *Vespa austriaca* Panzer, 1799, by subsequent designation of Ashmead, 1902, Can. Ent. 34: 164.

Pseudovespa Schmiedeknecht, 1881, Ent. Nachr. 7: 314, subgenus of *Vespa* Linnaeus.

Type species: *Vespa austriaca* Panzer, 1799, by monotypy.

Paravespula Blüthgen, 1938 (1937), Konowia 16: 271, subgenus of *Dolichovespula* Rohwer.

Type species: *Vespa vulgaris* Linnaeus, 1758, by original designation.

Allovespula Blüthgen, 1943, Stettin. Ent. Ztg. 104: 149, subgenus of *Paravespula* Blüthgen.

Type species: "*Paravespula rufa* (Linné)" (= *Vespa rufa* Linnaeus, 1758), by monotypy.

Rugovespula Archer, 1982, Kontyû 50 (2): 261, 264, subgenus of *Vespula* Thomson.

Type species: *Vespa koreensis* Radoszkowski, 1887, by original designation.

flaviceps (Smith)

Vespa japonica de Saussure, 1858, Rev. Mag. Zool. (2)10: 261 - "Japon" (MHN). Junior primary homonym of *Vespa japonica* Radoszkowski, 1857.

Vespa flaviceps Smith, 1870, in Horne and Smith, Trans. Zool. Soc. Lond. 7(3): 174 & 191, pl. XXI figs. 10, 11 - "Binsur, Kumaon, North-west Provinces of India" (BNHM).

"*Vespa Lewisii*, Sauss. Guêpes Soc. (MS.)" Smith, 1873, Trans. Ent. Soc. Lond. 1873 (2): 198. Nomen nudum.

Vespa "lewisii, Sauss. MS." Cameron, 1903a, Entomologist 36: 280, as a synonym of *Vespa japonica* de Saussure, 1858.

Vespa Saussurei Schulz, 1906, Spolia Hym.: 231. Replacement name for *Vespa japonica* de Saussure.

Vespa karenkona Sonan, 1929, Trans. Nat. Hist. Soc. Formosa. 19(101): 137 & 148 - "Karenkô (3000–6500 ft.)" (Taiwan) (holotype, TARI).

Vespa quadrimaculata Sonan, 1929, Trans. Nat. Hist. Soc. Formosa. 19 (101): 137 & 148 - "Arisan" (Taiwan) (holotype, TARI).

Vespa vulgaris var. *flavior* Stolfi, 1934, Bull. Soc. Venez. Stor. Nat. 1: 49 - "*India*: Bagarkote 8000 piedi. Kumaon W. Himalaia . . . Dal, sopra Dharmasala, 5500 piedi Punjab . . . Pindi Point, Murree 7242 piedi. Punjab . . . Rive del fiume Deo Gad e Foresta S. O. di Pinath, 7 miglia da Kausani Distr. Almora" (type depository unknown).

Vespula japonica pionganensis Giordani Soika, 1976, Ann. Hist.-Nat. Mus. Natl. Hung. 68: 287, 290, (in subgenus *Vespula*) "Za-mo san, 60 km NE from Pyongyang" (Korea) (HNHM). Also from other localities in Korea.

Vespa vulgaris var. *flavitor* [!], Das and Gupta, 1984 (1983), Orient. Ins. 17: 449. Incorrect spelling of *Vespa vulgaris* var. *flavior* Stolfi.

Vespula gracilia Lee, 1986, Sinozool. 10 (4): 201, 203, 206, fig. 2 - "Zhoushan, Zhejiang Province" (China) (IZAS). Also from Fujian.

Vespula yulongensis Dong and Wang, 2002, in Dong et al., J. S.-W. Agric. Univ. 24: 392 - "Yunnan China" (KIZAS).

Distribution: India: Kashmir, Himachal Pradesh, Punjab, Uttar Pradesh, Sikkim, Assam, Manipur, Meghalaya. Nepal. Myanmar. Thailand. China: Xizang, Yunnan, Shanxi, Sichuan, Heilongjiang, Jilin, Jiangsu, Beijing, Fujian, Zhejiang. **Hong Kong.** Taiwan. Russia: Primor'ye. Korea. Japan: Hokkaido, Honshu, Shikoku, Kyushu, Amami Island in Ryukyu Islands.

ACKNOWLEDGMENTS

The authors would like to thank Fuki Saito-Morooka, Rissho University, Tokyo, Japan for reviewing the manuscript and Graham Reels, UK for proof-reading this paper.

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Taxonomic note on the genus *Megalophasma* Bi, 1995 (Phasmida: Phasmatidae: Lonchodinae)

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壯蠨屬 *Megalophasma* Bi, 1995 的分類註釋 (蠨目: 蠨科: 長角棒蠨亞科)

何維俊

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This paper presents a taxonomic note on the genus *Megalophasma* Bi, 1995. The male and egg of *M. granulatum* Bi, 1995 are described for the first time. *Neohirasea asperatus* (Bates, 1865) is transferred to *Megalophasma* to become *Megalophasma asperatus* (Bates, 1865) **comb. nov.** A key to the genus is given.

Key Words: Phasmida, Lonchodinae, *Megalophasma*, new combination, China, India.

壯蠨屬 *Megalophasma* Bi, 1995 的分類註釋 (蠨目: 蠨科: 長角棒蠨亞科)

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摘要: 本文提供壯蠨屬 *Megalophasma* Bi, 1995 的分類註釋; 首次描述顆粒壯蠨 *Megalophasma granulatum* Bi, 1995 的雄蟲及蟲卵; 轉移粗糙新棘蠨 *Neohirasea asperatus* (Bates, 1865) 至壯蠨屬為粗糙壯蠨 *Megalophasma asperatus* (Bates, 1865) **comb. nov.**

關鍵字: 蠨目, 長角棒蠨亞科, 壯蠨屬, 新組合, 中國, 印度

INTRODUCTION

The genus *Megalophasma* Bi, 1995 was established based on six females which were collected from Medog in the southern Tibet region, China. Bi (1995) originally placed *Megalophasma* in Heteronemiidae Rehn, 1904 based on the similarity to *Parasosibia* Redtenbacher, 1908 (Necrosiinae Brunner von Wattenwyl, 1893). Otte and Brock (2005), and Chen and He (2008) retained the taxonomic placement. Hennemann et al. (2008), however, transferred *Megalophasma* to Lonchodinae Brunner von Wattenwyl, 1893 (Phasmatidae Gray, 1935) without detail explanation. By examining the type-species, *Megalophasma granulatum* Bi, 1995, I conclude that its thick-built mesofemora in female, dilated anal segment in male and egg structure are diagnostic for Lonchodinae. The male and egg of *M. granulatum* Bi, 1995 are described and illustrated for the first time to contribute to the knowledge of the species. A new combination is proposed: *Megalophasma asperatus* (Bates, 1865) **comb. nov.** transferred from *Neohirasea* Rehn, 1904.

MATERIALS AND METHODS

Illustrated drawings and descriptions for male and egg of *Megalophasma granulatum* Bi, 1995 are based on material deposited at the Shanghai Entomological

Museum, Shanghai, China. Measurements of the male and egg are given in millimetres. Ootaxonomic description of *Megalophasma granulatum* Bi, 1995 is based on eggs removed from the abdomen of a non-type adult female. The eggs were presumed to be mature according to general egg structure of Lonchodinae (Hennemann and Conle, 2008). Ootaxonomic description refers to Clark (1976a, 1976b, 1979, 1988, 1998), Clark-Sellick (1997) and Zompro (2004). The abbreviations for depositories are as follows:

SEM: Shanghai Entomological Museum, Shanghai, China

UMO: Hope Entomological Collections, University Museum, Oxford, United Kingdom.

RESULTS

Genus *Megalophasma* Bi, 1995

Megalophasma Bi, 1995: 453.

Bragg, 2001: 637.

Zompro, 2004: 314.

Otte and Brock, 2005: 198.

Hennemann et al., 2008: 15.

Chen and He, 2008: 157.

Type-species: *Megalophasma granulata* Bi, 1995 (= *Megalophasma granulatum*): 453, by original designation.

Notes: Only two species are known from the genus.

Distribution: This genus is restricted to the southern Tibet region of China and the northern West Bengal region of India in the Himalaya.

Key to *Megalophasma* Bi, 1995:

1. Female 2
- Male 3
2. Vertex with a pair of apically rounded horns; postero-lateral angles of seventh tergum triangularly expanded *M. granulatum*
- Vertex with a pair of apically pointed horns; postero-lateral angles of seventh tergum not expanded *M. asperatum* **comb. nov.**
3. Vertex with a pair of apically rounded horns; mesonotum inconspicuously granulated; antero-ventral and postero-ventral carinae of femora with three to four spines *M. granulatum*

- Vertex with a pair of apically pointed horns; mesonotum distinctly granulated; antero-ventral and postero-ventral carinae of femora with two to three spines *M. asperatum* **comb. nov.**

***Megalophasma granulatum* Bi, 1995**

Megalophasma granulata, Bi, 1995: 454, figs. 8-11.

Otte and Brock, 2005: 198.

Hennemann et al., 2008: 15.

Chen and He, 2008: 157, figs. 125: A-B.

Types: Holotype: ♀, Medog, Xizang (Tibet), China, 2.VII.1980, Jin Gentao & Wu Jianyi (SEM); Paratypes: 6♀♀, Medog, Xizang (Tibet), China, 2-18.VII.1980, Jin Gentao & Wu Jianyi (SEM).

Other material examined: 22♂♂, 6♀♀, 10 extracted eggs, Medog, Xizang (Tibet), China, 2-18.VII.1980, Jin Gentao & Wu Jianyi (SEM).

Description of male (Figs. 1-3): Medium-sized. General colour of body and legs olive brown. Body slender, covered with inconspicuous granules.

Head: Oval, about 1.5 times longer than wide. Sparsely covered with small granules. Vertex flat, with an oblong depression between bases of antennae and with two flattened elevations between the compound eyes. Genae with a short pale postocular stripe behind eyes. Occiput flat. Median occipital furrow indistinct. Posterior margin with six small swellings, median pair larger than lateral one. Compound eyes light brown, rounded, with a dark transverse stripe. Antennae filiform, reaching apices of protibiae, segments indistinct, sparsely covered with blackish setae; first segment cylindrical, flattened basally, about 3 times longer than second segment, slightly longer than third segment.

Thorax: Pronotum sparsely covered with small granules, almost as long as head, rectangular, anterior margin truncate, posterior margin rounded, transverse and longitudinal sulci crossing at middle. Mesonotum mainly reddish brown except the posterior region which is olive brown; elongate, 4.5-5.5 times longer than pronotum, distinctly longer than mesofemora, broadly emarginated medially, posterior margin distinctly broader than head; median line distinct, densely covered with small inconspicuous granules, lateral margins with a row of minute pits. Mesosternum reddish brown with small inconspicuous granules. Metanotum longer than the combined length of head and pronotum with minute pits along lateral margins, inconspicuously granulated. Mesopleura, metapleura and metasternum olive brown, with inconspicuous granules.

Abdomen: Cylindrical, brown, terminal three terga dark brown; as long as antennae, longer than the combined length of head and thorax, lacking granules. Parallel-sided from second to seventh terga, with a row of minute pits laterally. Median segment marginally longer than the head. Second to fifth terga equal in length. Sixth tergum shorter than fifth tergum. Eighth tergum expanded posteriorly, posterior margin 2 times longer than the anterior margin. Ninth tergum as long as

eighth tergum, moderately constricted posteriorly. Anal segment as long as seventh tergum, elongate, with deep V-shaped emargination on posterior margin, split into two semi-terga at distal half. Semi-terga tapering posteriorly, inner margin curved, apices curved inward with small dentations. Poculum cup-like, medially carinate, reaching anterior region of anal segment, posterior margin with a small indentation. Cerci light brown, cylindrical and short, with short setae, apices curved inward.

Legs: Femora thick-built. Tibiae slender than the femora. Densely covered with short setae. Olive brown as most parts of body, apices of femora and tibiae with darker colour. Profemora curved basally, longer than mesonotum. Postero-ventral and antero-ventral carinae of femora with three to four small spines near apex. Medio-ventral carina slightly raised basally.

Measurements: See Table 1.

Description of egg (Figs. 4-5): Capsule brown, oval-shaped, surface lacking granulation. Operculum flat, with distinct closed-stalked capitulum. Micropylar plate oblong, tapering anteriorly, anterior apex rounded. Micropylar cup placed near the end of micropylar plate. Length 1.4 mm., width 0.9 mm., height 10 mm.

Notes: The male and egg are described for the first time. This species favours the lower levels of the scattered forests in the type-locality (private communication with Xie Guanglin, Hebei University).

Distribution: Tibet (Medog), China.

Megalophasma asperatum* (Bates, 1865) **comb. nov.*

Lonchodes asperatus, Bates: 1865: 339.

Staelonchodes asperatus, Kirby, 1904: 318.

Menexenus asperatus, Brunner von Wattenwyl, 1907: 245.

Neohirasea asperatus, Otte and Brock, 2005: 217.

Types: Syntypes: 1♂, 2♀♀, Darjeeling, India (UMO), assessed by Phasmida Species File's images (Brock, 2014).

Notes: This species was originally placed in *Lonchodes* Gray, 1835 and later transferred to *Staelonchodes* Kirby, 1904 (a junior synonym of *Lonchodes*), *Menexenus* Stål, 1875 and *Neohirasea* Rehn, 1904 (Kirby, 1904; Brunner von Wattenwyl, 1907; Otte and Brock, 2005). In fact, it is closely related to *Megalophasma granulatum* Bi, 1995 and here combined. This species is not recorded in China.

Distribution: West Bengal (Darjeeling), India.

ACKNOWLEDGMENTS

I wish to deeply thank the Shanghai Entomological Museum, Chinese Academy of Sciences for giving access to the corresponding collections and loan of specimens. I also deeply thank Prof Shi Fu-Ming (Hebei University, Hebei, China) for giving valuable comments on the draft and Mr Paul Brock (National History Museum, London, UK) for sending requested references.

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TABLE AND FIGURES

Table 1. Measurements of male *Megalophasma granulatum* Bi, 1995.

Body part	Length mm	Mean (n = 8)
Body	66–77	70.1
Head	3–3.5	3.2
Antennae	30–37	31.9
Pronotum	3–3.5	3.1
Mesonotum	14–17	15.5
Metanotum	8–10	8.6
Median segment	3–3.5	3
Profemora	16–18	16.5
Mesofemora	11–12	11.9
Metafemora	14–17	15.9
Protibiae	16–18	16.8
Mesotibiae	11–13	11.8
Metatibiae	15–17	16

Figure 2–3. Male *Megalophasma granulatum* Bi, 1995 [scale bar 5 mm]. 2. Male, end of abdomen, lateral view. 3. Male, end of abdomen, dorsal view. (Drawing by author)

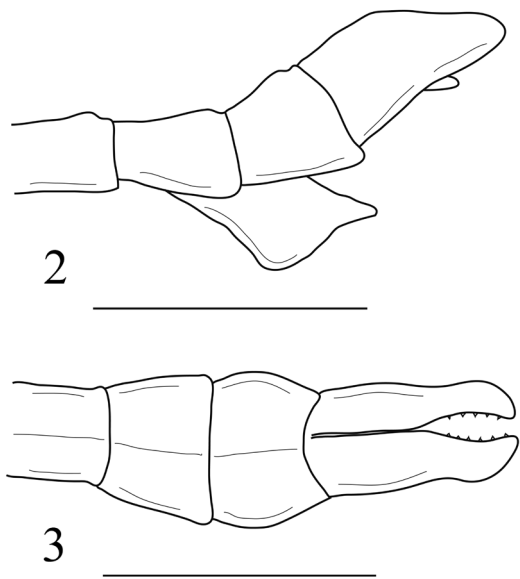


Figure 4–5. Egg of *Megalophasma granulatum* Bi, 1995 (scale bar 1 mm). 4. Lateral view. 5. Dorsal view. (Drawing by author)

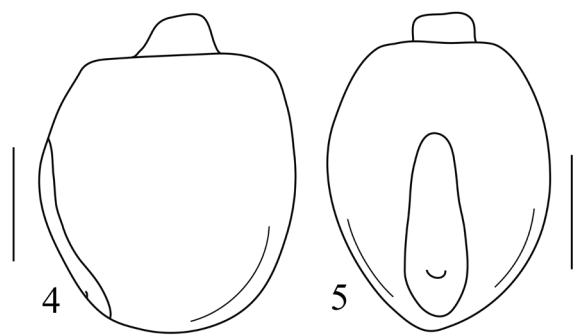
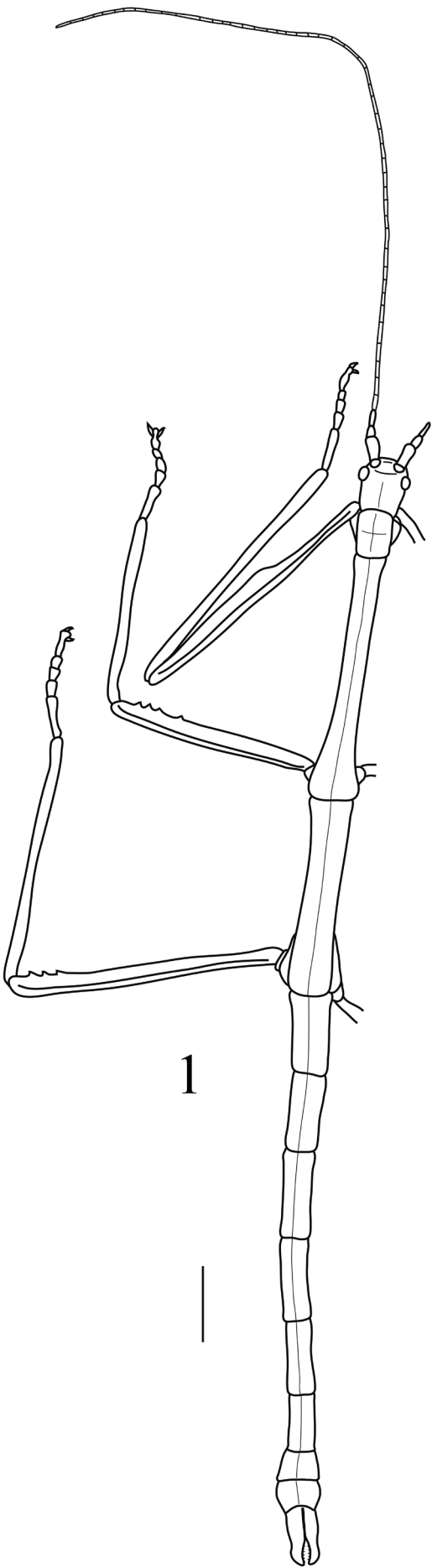


Figure 1. Body of male *Megalophasma granulatum* Bi, 1995 [scale bar 5 mm]. (Drawing by author)



First record of the subfamily Lepturinae from the Hong Kong Fauna (Coleoptera, Cerambycidae)

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ABSTRACT

The genus *Caraphia* Gahan, 1906 is recorded from Hong Kong for the first time, representing the first record of the subfamily Lepturinae from the Hong Kong fauna.

Key words. *Caraphia*, Lepturinae, Hong Kong, first record.

INTRODUCTION

Gahan (1906) established the genus *Caraphia* under the subfamily Lepturinae, and described two species, *C. cribrata*, originally designated as type species, and *C. minor*, both from Burma (Myanmar). A third species *Microrhabdium laticeps* Pic, 1922 was also described under Lepturinae. *Neosalpinia lepturoides* Matsushita, 1933 was initially placed in the subfamily Cerambycinae, though now the genus *Neosalpinia* Matsushita, 1933 is considered a junior synonym of *Caraphia* (Chou & Ohbayashi, 2008). Recent authors invariably place *Caraphia* in the Lepturinae, though tribal affiliation varies. Ohbayashi (1992) proposed it be placed in the Lepturini and this has been followed by recent authors (Löbl & Smetana, 2010). However, Chou & Ohbayashi (2008) suggested that the genus *Caraphia* should be placed neither in Lepturini nor in Xylosteini, and that a new tribe be designated to incorporate this genus.

Caraphia Gahan, 1906 contains 12 species (Tavakilian G. (Author) & Chevillotte (software), 2013), with seven species reported in the Palaearctic Catalogue (Löbl & Smetana, 2010). Only four species have been recorded from China (Löbl & Smetana, 2010).

No Lepturine species has previously been recorded in Hong Kong (Yiu, 2009). The specimens from Hong Kong closely resemble *Caraphia lepturoides* (Matsushita, 1933) which is known only from Japan.

MATERIALS AND METHODS

Material: 1 female, Hong Kong, Lantau, Wang Tong, 2011.vi, coll. Paul Aston. 1 male, Hong Kong, Lantau, Wang Tong, 2011.v.28, coll. Paul Aston, by light trap.

The specimens were observed using a Leica S8APO microscope, and sent to the Lepturinae expert Prof. Nobuo Ohbayashi for species identification. Pictures were taken with a SONY T 30 camera.

DESCRIPTION OF HONG KONG MATERIAL (Figs. 1-6)

Length: from antennal insertions to the apices of elytra 8.7 mm in male, 9.6 mm in female, width at humeri 2.4 mm in male, 2.8 mm in female.

Body: dark brown, head, antennal scape, prothorax and elytra deeply and closely punctured with scale-like sub-erect pale yellow hairs arising from the punctures; the hairs on the elytra arranged in 11 longitudinal rows; second to eleventh segment of antenna furnished with very thin appressed pubescence; ventral surface moderately punctured with curved recumbent pale yellow pubescence; legs moderately covered with pale yellow pubescence.

Head (Figs. 3 & 5): nearly as long as wide, widest across eyes; labrum very short, transverse; clypeus produced in front, trapezoidal; frons oblique with sides carinate in reverse parenthesis shape as Λ ; gena short; antennal insertion distinctly elevated; vertex depressed in U-shape; eyes very large, coarsely faceted (Fig. 5), deeply emarginate near the middle of lobes around antennal insertions. Antennae long and slender, about 1.5 times as long as body length and the middle of eighth segment exceeding the elytral apex; scape longer than third, 5th the longest; scape and second antennomere cylindrical, 3rd to 7th not so cylindrical and with irregular carinae, 8th to the last segments square shaped in cross section with regular carinae (Fig. 4); relative lengths of segments as follows: male: 54 : 10 : 43 : 49 : 73 : 70 : 68 : 65 : 63 : 60 : 63; female: 58 : 10 : 48 : 50 : 77 : 74 : 70 : 67 : 67 : 67 : 69.

Prothorax: widest near base, 1.2 times as long as wide, almost parallel-sided in basal half, then slightly convergent apically; disc lightly convex above with a transverse depression near base; apex marginate, 0.73 time as wide as basal width.

Scutellum linguat. Elytra about 2.5 times as long as basal width, widest near base, basal four fifths nearly parallel-sided, then gently narrowed toward the truncate apices; disc lightly swollen on both sides behind scutellum, provided with 11 rows of quadrate deep setigerous punctures.

Legs: moderately long and slender; femora sub-linear; hind tarsi short with first segment as long as second and third combined; third tarsal segment deeply cleft.

DISCUSSION

According to Prof. Nobuo Ohbayashi (personal communication, 2013-07-05), the two specimens from Hong Kong are close to *Caraphia lepturoides* (Matsushita, 1933) which is known only from Japan, though it will require careful comparison with other Asian species, including genital structures. Prof. Ohbayashi is currently working on a revision study of Chinese *Caraphia* and the details will be given in the near future. Shortly before printing Prof. N. Ohbayashi informed us that the *Caraphia* species described here is actually a new species to science and that a formal description will be published soon.

ACKNOWLEDGEMENTS

We thank Prof. Nobuo Ohbayashi for his assistance and review of this paper. Special thanks are due to the Agriculture, Fisheries and Conservation Department of the Hong Kong SAR Government, for inviting the senior author to Hong Kong, thereby making this collaboration possible.

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FIGURES

Figures 1-6. *Caraphia* nr. *lepturoides* (Matsushita, 1933) from Hong Kong. **1.** Female, caught on June, 2011; **a**, dorsal view; **b**, lateral view. **2.** Male, caught on 28 May, 2011 by light trap. **3.** Head in frontal view. **4.** Antennomeres IX and X, showing the carinae. **5.** Head and pronotum in dorsal view, showing the scale-like hairs and coarsely faceted eyes. **6.** Divided stridulatory plate of mesonotum. **Note:** images 1-2 scale 2mm, images 3-6 not to scale.

